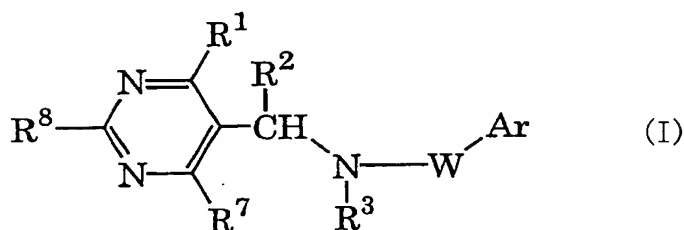


IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A pyrimidine derivative represented by the formula

(I)



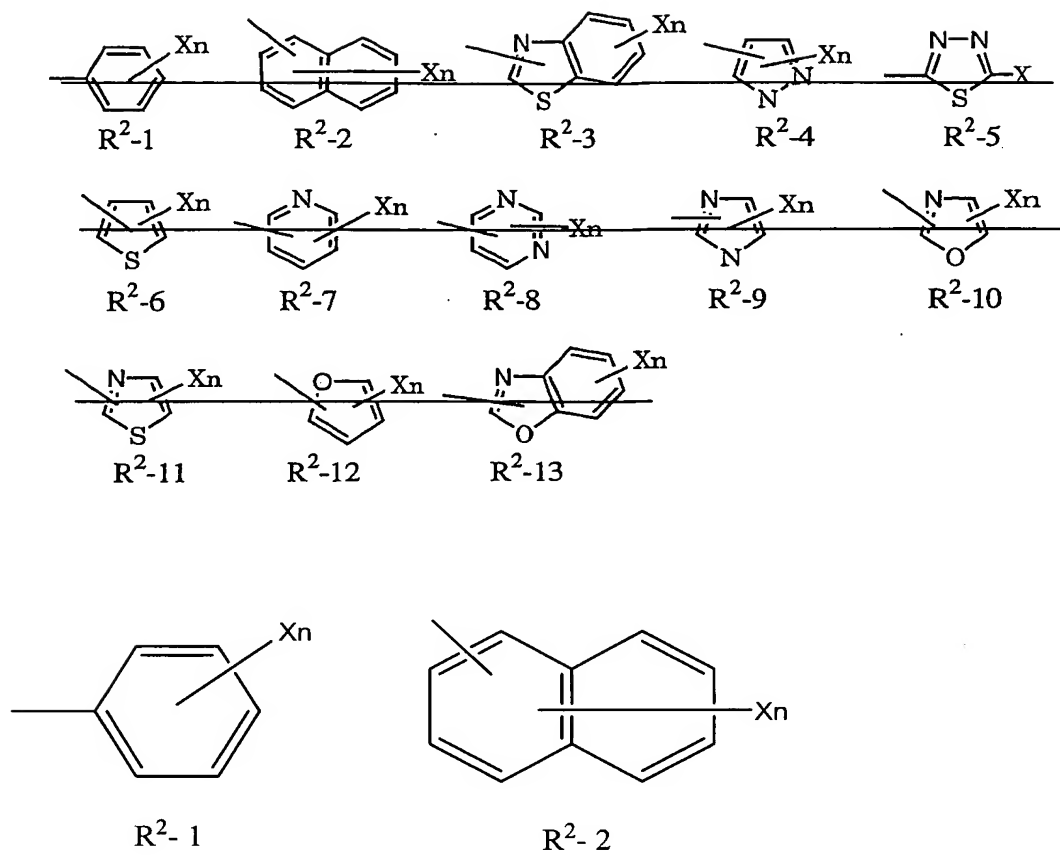
wherein  $R^1$  is a hydrogen atom (except for a case where  $R^2$  = hydrogen atom, and  $W=SO_2$ ), a halogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkylcarbonyl  $C_1$ - $C_6$  alkyl group, a hydroxyl group, a  $C_2$ - $C_6$  alkenyl group, a  $C_2$ - $C_6$  alkynyl group, a  $C_3$ - $C_6$  cycloalkyl group (this group may be substituted by a halogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkoxy group or a  $C_1$ - $C_4$  haloalkyl group), a  $C_1$ - $C_4$  haloalkyl group, a  $C_1$ - $C_6$  alkoxy group, a  $C_1$ - $C_4$  haloalkoxy group, a  $C_2$ - $C_6$  alkenyloxy group, a  $C_2$ - $C_6$  alkynyloxy group, a  $C_3$ - $C_6$  cycloalkyloxy group, a phenyl group (this group may be substituted by a halogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkoxy group, a  $C_1$ - $C_4$  haloalkyl group, a  $C_1$ - $C_4$  haloalkoxy group, a cyano group, a cyano  $C_1$ - $C_6$  alkyl group, a nitro group, a  $C_1$ - $C_6$  alkylthio group, a  $C_1$ - $C_6$  alkylsulfinyl group or a  $C_1$ - $C_6$  alkylsulfonyl group), a

$C_1$ - $C_6$  alkylthio group (except for a case where  $R^2$  = phenyl group, and  $W=SO_2$ ), a  $C_2$ - $C_6$  alkenylthio group, a  $C_2$ - $C_6$  alkynylthio group, a  $C_3$ - $C_6$  cycloalkylthio group, a  $C_1$ - $C_6$  alkylsulfinyl group, a  $C_2$ - $C_6$  alkenylsulfinyl group, a

$C_2$ - $C_6$  alkynylsulfinyl group, a  $C_3$ - $C_6$  cycloalkylsulfinyl group, a  $C_1$ - $C_6$  alkylsulfonyl group, a  $C_2$ - $C_6$  alkenylsulfonyl group, a  $C_2$ - $C_6$  alkynylsulfonyl group, a  $C_3$ - $C_6$  cycloalkylsulfonyl group, a  $C_1$ - $C_6$  hydroxyalkyl group, a  $C_2$ - $C_7$  acyl group, a  $C_1$ - $C_6$  alkoxy

C<sub>1</sub>-C<sub>6</sub> alkyl group, a cyano group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl C<sub>2</sub>-C<sub>6</sub> alkenyl group, a carboxyl group, a carboxyl C<sub>1</sub>-C<sub>6</sub> alkyl group, a di C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxyimino C<sub>1</sub>-C<sub>6</sub> alkyl group, a hydroxyimino C<sub>1</sub>-C<sub>6</sub> alkyl group, a dioxolanyl group (this group may be substituted by a C<sub>1</sub>-C<sub>6</sub> alkyl group), an aldehyde group, an oxiranyl group, a NR<sup>9</sup>R<sup>10</sup> group or a CONR<sup>9</sup>R<sup>10</sup> group, and R<sup>9</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group, a C<sub>2</sub>-C<sub>7</sub> acyl group or a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group, and R<sup>10</sup> is a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group, a C<sub>2</sub>-C<sub>7</sub> acyl group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl group or a benzyloxycarbonyl group; ~~here R<sup>9</sup> and R<sup>10</sup> may, together with the carbon atom to which they are bonded, form a 5 to 7 membered saturated ring,~~

R<sup>2</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group (this group may be substituted by a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group or a C<sub>1</sub>-C<sub>4</sub> haloalkyl group), a C<sub>2</sub>-C<sub>7</sub> acyl group, a cyano group, a di C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxyimino C<sub>1</sub>-C<sub>6</sub> alkyl group, a hydroxyimino C<sub>1</sub>-C<sub>6</sub> alkyl group, a dioxolanyl group (this group may be substituted by a C<sub>1</sub>-C<sub>6</sub> alkyl group), a cyano C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> hydroxyalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl C<sub>1</sub>-C<sub>6</sub> alkyl group, a CR<sup>11</sup>R<sup>12</sup>NR<sup>9</sup>R<sup>10</sup> group, a CONR<sup>9</sup>R<sup>10</sup> group, a CR<sup>11</sup>R<sup>12</sup>CONR<sup>9</sup>R<sup>10</sup> group or a group represented by ~~any one of the formulae R<sup>2</sup>-1 to R<sup>2</sup>-13~~ R<sup>2</sup>-1 or R<sup>2</sup>-2:



( and wherein X is a hydrogen atom, a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a NR<sup>9</sup>R<sup>10</sup> group, a CONR<sup>9</sup>R<sup>10</sup> group, a C<sub>1</sub>-C<sub>4</sub> haloalkoxy group, a C<sub>2</sub>-C<sub>6</sub> alkenyloxy group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyloxy group, a

C<sub>2</sub>-C<sub>7</sub> acyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfinyl group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group, a cyano group, a nitro group or a

C<sub>1</sub>-C<sub>4</sub> haloalkyl group, and n is an integer of from 1 to 3, and when n is an integer of 2 or 3, the plurality of X may be the same or different, and two adjacent lower alkoxy groups may be bonded to each other to form a C<sub>1</sub>-C<sub>3</sub> alkylenedioxy group);

each of R<sup>11</sup> and R<sup>12</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group or a C<sub>1</sub>-C<sub>6</sub> alkoxy group;

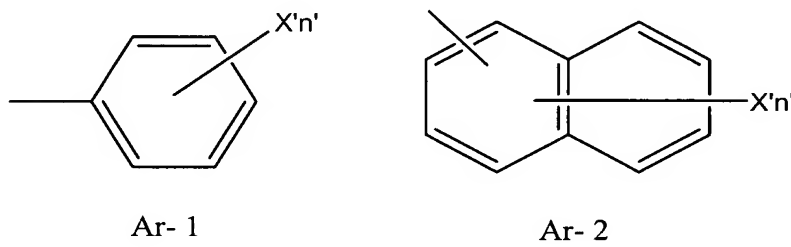
$R^3$  is a hydrogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_2$ - $C_6$  alkenyl group, a  $C_2$ - $C_6$  alkynyl group, a  $C_1$ - $C_6$  alkoxy group, a di  $C_1$ - $C_6$  alkylamino group, a  $C_3$ - $C_6$  cycloalkyl group, a  $C_1$ - $C_6$  alkoxy  $C_1$ - $C_6$  alkyl group, a cyano  $C_1$ - $C_6$  alkyl group, a  $C_3$ - $C_6$  cycloalkyl  $C_1$ - $C_6$  alkyl group, an oxiranyl  $C_1$ - $C_6$  alkyl group or a  $C_1$ - $C_6$  alkoxycarbonyl  $C_1$ - $C_6$  alkyl group; ;

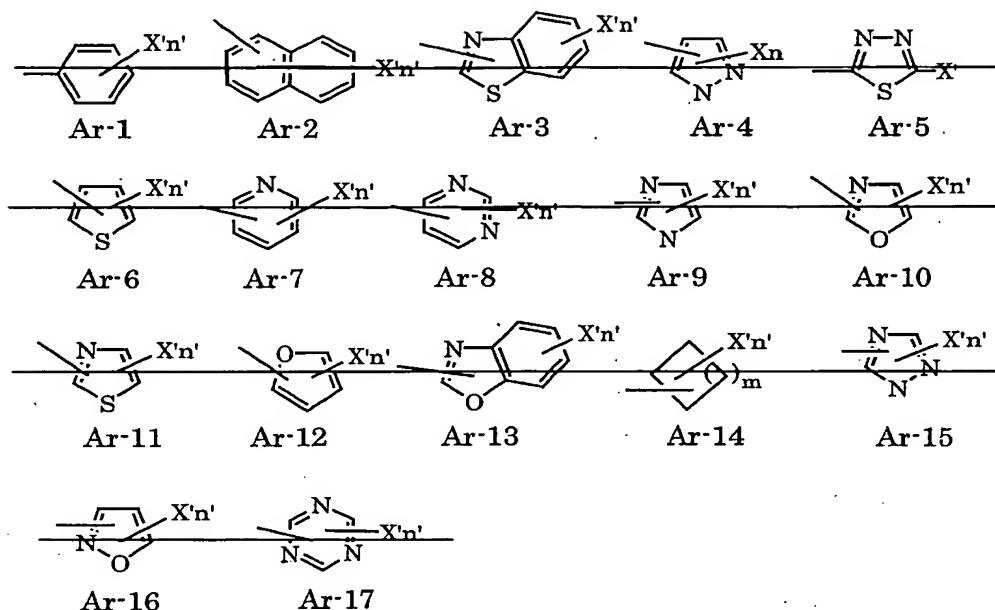
W is a  $-C(=Q)Z-$  group or a  $-SO_2-$  group, Q is an oxygen atom or a sulfur atom, Z is an oxygen atom, a sulfur atom, a  $-NR^6-$  group, a

$-CH_2CH_2-$  group, a  $-CH=CH-$  group, a  $-C(R^4)R^5-$  group, a

$-C(R^4)R^5-Q-$  group, a  $-Q-C(R^4)R^5-$  group, a  $-C(=Q)-$  group, a  $-NR^6NR^{6a}-$  group or a  $-NR^6C(R^4)R^5-$  group, and each of  $R^4$  and  $R^5$  is a hydrogen atom, a  $C_1$ - $C_6$  alkyl group, a halogen atom, a  $C_1$ - $C_6$  alkoxy group or a  $C_1$ - $C_6$  alkylthio group, each of  $R^6$  and  $R^{6a}$  is a hydrogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_2$ - $C_6$  alkenyl group or a  $C_2$ - $C_6$  alkynyl group; ~~here  $R^3$  and  $R^6$  may, together with the carbon atom to which they are bonded, form a 5 to 7 membered cyclic urea,~~

Ar is a group represented by ~~any one of the formulae Ar-1 to Ar-17~~ Ar-1 or Ar-2:





and (wherein  $X'$  is a hydrogen atom, a halogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_2$ - $C_6$  alkenyl group, a  $C_2$ - $C_6$  alkynyl group, a  $C_1$ - $C_6$  alkoxy group, a  $C_1$ - $C_6$  alkoxy  $C_1$ - $C_6$  alkyl group, a  $NR^9R^{10}$  group, a  $CONR^9R^{10}$  group, a  $C_1$ - $C_4$  haloalkoxy group, a  $C_2$ - $C_6$  alkenyloxy group, a  $C_3$ - $C_6$  cycloalkyloxy group, a

$C_2$ - $C_7$  acyl group, a  $C_1$ - $C_6$  alkoxycarbonyl group, a  $C_1$ - $C_6$  alkylthio group, a  $C_1$ - $C_6$  alkylsulfinyl group, a  $C_1$ - $C_6$  alkylsulfonyl group, a cyano group, a nitro group or a

$C_1$ - $C_4$  haloalkyl group,  $n'$  is an integer of from 1 to 3,  ~~$m$  is an integer of from 0 to 3,~~  
and when  $n'$  is an integer of 2 or 3, the plurality of  $X'$  may be the same or different, and two adjacent lower alkoxy groups may be bonded to each other to form a  $C_1$ - $C_3$  alkylenedioxy group);

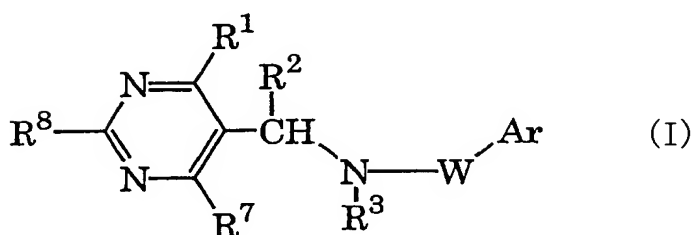
$R^7$  is a hydrogen atom, a halogen atom, a  $C_1$ - $C_6$  alkyl group, a

$C_1$ - $C_6$  alkoxy group, a  $C_1$ - $C_6$  alkylthio group, a  $C_1$ - $C_4$  haloalkyl group or a  $C_3$ - $C_6$  cycloalkyl group; and

$R^8$  is a hydrogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkylthio group, a  $C_1$ - $C_4$  haloalkyl group or a  $C_3$ - $C_6$  cycloalkyl group.

Claim 2 (Currently Amended): A pyrimidine derivative represented by the formula

(I)

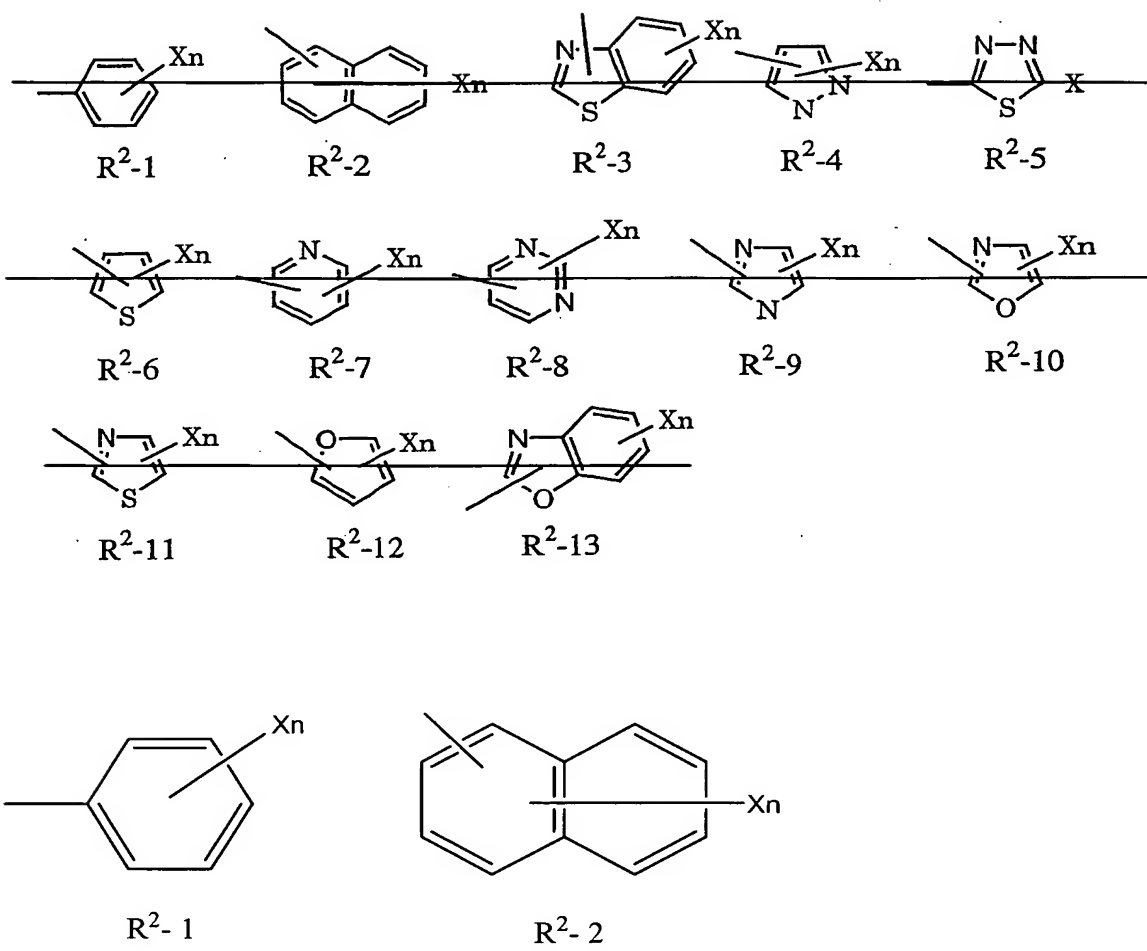


wherein  $R^1$  is a hydrogen atom, a halogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkylcarbonyl  $C_1$ - $C_6$  alkyl group, a hydroxyl group, a  $C_2$ - $C_6$  alkenyl group, a  $C_2$ - $C_6$  alkynyl group, a  $C_3$ - $C_6$  cycloalkyl group (this group may be substituted by a halogen atom, a  $C_1$ - $C_6$  alkyl group, a

$C_1$ - $C_6$  alkoxy group or a  $C_1$ - $C_4$  haloalkyl group), a  $C_1$ - $C_4$  haloalkyl group, a  $C_1$ - $C_6$  alkoxy group, a  $C_1$ - $C_4$  haloalkoxy group, a  $C_2$ - $C_6$  alkenyloxy group, a  $C_2$ - $C_6$  alkynyloxy group, a  $C_3$ - $C_6$  cycloalkyloxy group, a phenyl group (this group may be substituted by a halogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkoxy group, a  $C_1$ - $C_4$  haloalkyl group, a  $C_1$ - $C_4$  haloalkoxy group, a cyano group, a nitro group, a  $C_1$ - $C_6$  alkylthio group, a  $C_1$ - $C_6$  alkylsulfinyl group or a  $C_1$ - $C_6$  alkylsulfonyl group), a  $C_1$ - $C_6$  alkylthio group, a  $C_2$ - $C_6$  alkenylthio group, a  $C_2$ - $C_6$  alkynylthio group, a  $C_3$ - $C_6$  cycloalkylthio group, a  $C_1$ - $C_6$  alkylsulfinyl group, a  $C_2$ - $C_6$  alkenylsulfinyl group, a  $C_2$ - $C_6$  alkynylsulfinyl group, a  $C_3$ - $C_6$  cycloalkylsulfinyl group, a  $C_1$ - $C_6$  alkylsulfonyl group, a  $C_2$ - $C_6$  alkenylsulfonyl group, a  $C_2$ - $C_6$  alkynylsulfonyl group, a  $C_3$ - $C_6$  cycloalkylsulfonyl group, a hydroxyalkyl group, a  $C_2$ - $C_7$  acyl group, a  $C_1$ - $C_6$  alkoxy  $C_1$ - $C_6$  alkyl group, a cyano group, a cyano  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkoxycarbonyl group, a  $C_1$ -

C<sub>6</sub> alkoxy carbonyl C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy carbonyl C<sub>2</sub>-C<sub>6</sub> alkenyl group, a carboxyl group, a carboxyl C<sub>1</sub>-C<sub>6</sub> alkyl group, a di C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxyimino C<sub>1</sub>-C<sub>6</sub> alkyl group, a hydroxyimino C<sub>1</sub>-C<sub>6</sub> alkyl group, a dioxolanyl group (this group may be substituted by a C<sub>1</sub>-C<sub>6</sub> alkyl group), an aldehyde group, an oxiranyl group, a NR<sup>9</sup>R<sup>10</sup> group or a CONR<sup>9</sup>R<sup>10</sup> group, and R<sup>9</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group, a C<sub>2</sub>-C<sub>7</sub> acyl group or a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group, and R<sup>10</sup> is a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group, a C<sub>2</sub>-C<sub>7</sub> acyl group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy carbonyl group or a benzyloxy carbonyl group; ~~here R<sup>9</sup> and R<sup>10</sup> may, together with the carbon atom to which they are bonded, form a 5 to 7 membered saturated ring,~~

R<sup>2</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group (this group may be substituted by a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group or a C<sub>1</sub>-C<sub>4</sub> haloalkyl group), a C<sub>2</sub>-C<sub>7</sub> acyl group, a cyano group, a di C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxyimino C<sub>1</sub>-C<sub>6</sub> alkyl group, a hydroxyimino C<sub>1</sub>-C<sub>6</sub> alkyl group, a ~~dioxolanyl group (this group may be substituted by a C<sub>1</sub>-C<sub>6</sub> alkyl group),~~ a cyano C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> hydroxyalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy carbonyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy carbonyl C<sub>1</sub>-C<sub>6</sub> alkyl group, a CR<sup>11</sup>R<sup>12</sup>NR<sup>9</sup>R<sup>10</sup> group, a CONR<sup>9</sup>R<sup>10</sup> group, a CR<sup>11</sup>R<sup>12</sup>CONR<sup>9</sup>R<sup>10</sup> group or a group represented by ~~any one of the formulae R<sup>2</sup>-1 to R<sup>2</sup>-13~~ R<sup>2</sup>-1 or R<sup>2</sup>-2:



and (wherein X is a hydrogen atom, a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a NR<sup>9</sup>R<sup>10</sup> group, a CONR<sup>9</sup>R<sup>10</sup> group, a C<sub>1</sub>-C<sub>4</sub> haloalkoxy group, a C<sub>2</sub>-C<sub>6</sub> alkenyloxy group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyloxy group, a

C<sub>2</sub>-C<sub>7</sub> acyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfinyl group, a C<sub>1</sub>-C<sub>6</sub> alkylsufonyl group, a cyano group, a nitro group or a

C<sub>1</sub>-C<sub>4</sub> haloalkyl group, n is an integer of from 1 to 3, and when n is an integer of 2 or 3, the plurality of X may be the same or different, and two adjacent lower alkoxy groups may be bonded to each other to form a C<sub>1</sub>-C<sub>3</sub> alkylenedioxy group), and each of R<sup>11</sup> and R<sup>12</sup> is a



hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group or a C<sub>1</sub>-C<sub>6</sub> alkoxy group; ;

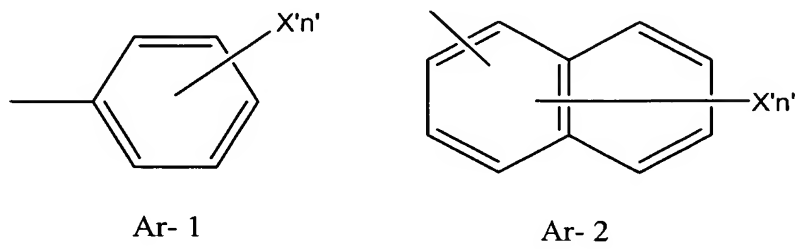
R<sup>3</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a di C<sub>1</sub>-C<sub>6</sub> alkylamino group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a cyano C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl C<sub>1</sub>-C<sub>6</sub> alkyl group, an oxiranyl C<sub>1</sub>-C<sub>6</sub> alkyl group or a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl C<sub>1</sub>-C<sub>6</sub> alkyl group; ;

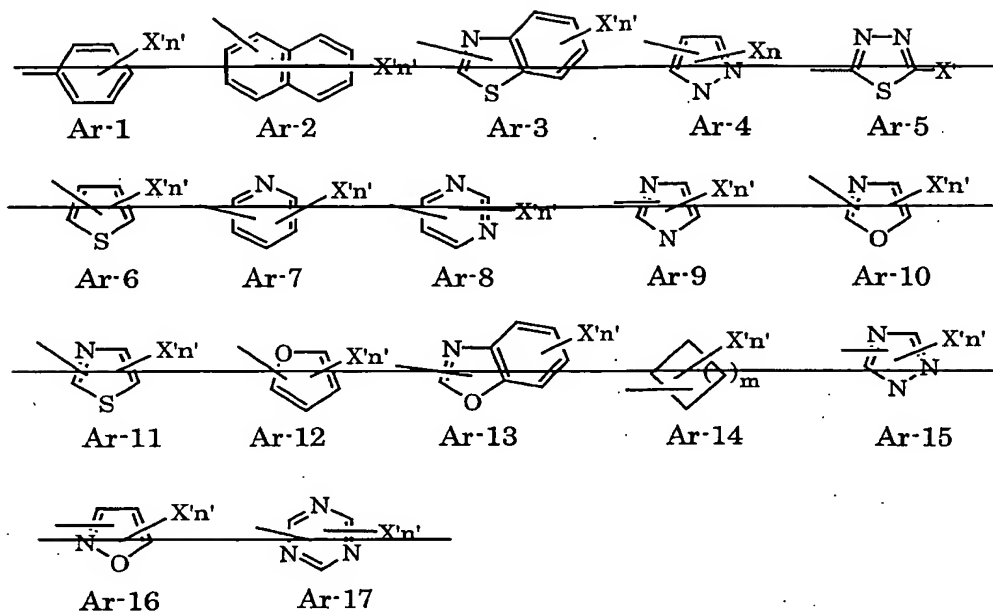
W is a -C(=Q)Z- group, Q is an oxygen atom or a sulfur atom, Z is an oxygen atom, a sulfur atom, a -NR<sup>6</sup>- group, a

-CH<sub>2</sub>CH<sub>2</sub>- group, a -CH=CH- group, a -C(R<sup>4</sup>)R<sup>5</sup>- group, a

-C(R<sup>4</sup>)R<sup>5</sup>-Q- group, a -Q-C(R<sup>4</sup>)R<sup>5</sup>- group, a -C(=Q)- group, a -NR<sup>6</sup>NR<sup>6a</sup>- group or a -NR<sup>6</sup>C(R<sup>4</sup>)R<sup>5</sup>- group, each of R<sup>4</sup> and R<sup>5</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkoxy group or a C<sub>1</sub>-C<sub>6</sub> alkylthio group, each of R<sup>6</sup> and R<sup>6a</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group or a C<sub>2</sub>-C<sub>6</sub> alkynyl group; ; here R<sup>3</sup> and R<sup>6</sup> may, together with the carbon atom to which they are bonded, form a 5- to 7-membered cyclic urea;

Ar is a group represented by ~~any one of the formulae Ar-1 to Ar-17~~ Ar-1 or Ar-2:





and (wherein X' is a hydrogen atom, a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a NR<sup>9</sup>R<sup>10</sup> group, a CONR<sup>9</sup>R<sup>10</sup> group, a C<sub>1</sub>-C<sub>4</sub> haloalkoxy group, a C<sub>2</sub>-C<sub>6</sub> alkenyloxy group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyloxy group, a

C<sub>2</sub>-C<sub>7</sub> acyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfinyl group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group, a cyano group, a nitro group or a

C<sub>1</sub>-C<sub>4</sub> haloalkyl group, n' is an integer of from 1 to 3, ~~m is an integer of from 0 to 3,~~  
 and when n' is an integer of 2 or 3, the plurality of X' may be the same or different, and two adjacent lower alkoxy groups may be bonded to each other to form a C<sub>1</sub>-C<sub>3</sub> alkylenedioxy group);

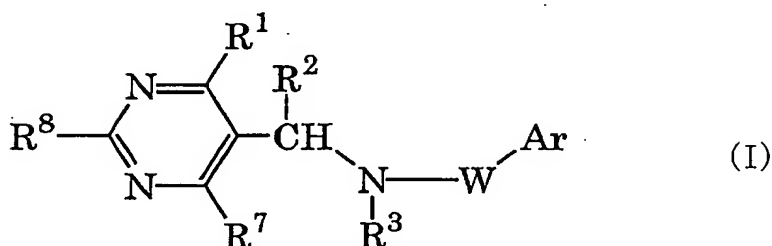
R<sup>7</sup> is a hydrogen atom, a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a

C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group or a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group; and

$R^8$  is a hydrogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkylthio group, a  $C_1$ - $C_4$  haloalkyl group or a  $C_3$ - $C_6$  cycloalkyl group.

Claim 3 (Currently Amended): A pyrimidine derivative represented by the formula

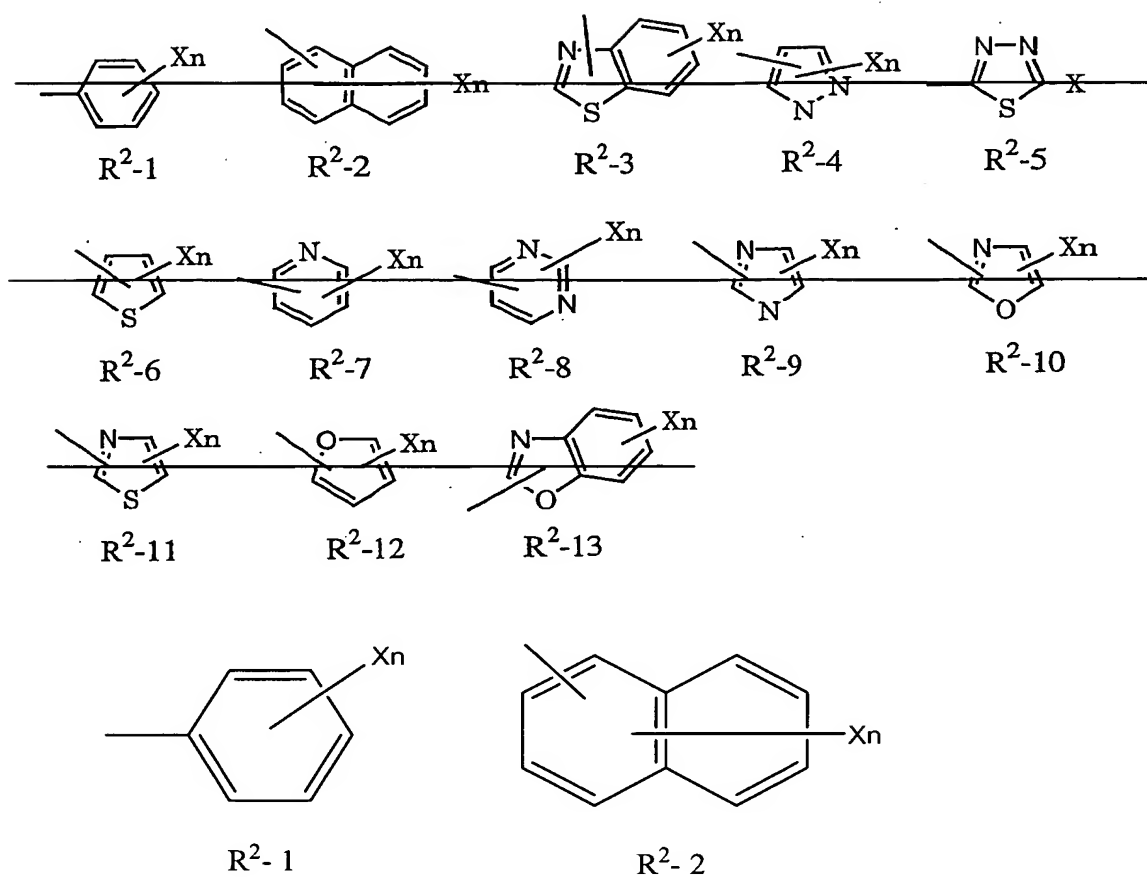
(I)



wherein  $R^1$  is a halogen atom, a  $C_1$ - $C_6$  alkyl group, an oxo  $C_1$ - $C_6$  alkyl group, a hydroxyl group, a  $C_2$ - $C_6$  alkenyl group, a  $C_2$ - $C_6$  alkynyl group, a  $C_3$ - $C_6$  cycloalkyl group (this group may be substituted by a halogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkoxy group or a  $C_1$ - $C_4$  haloalkyl group), a  $C_1$ - $C_4$  haloalkyl group, a  $C_1$ - $C_6$  alkoxy group, a  $C_1$ - $C_4$  haloalkoxy group, a  $C_2$ - $C_6$  alkenyloxy group, a  $C_2$ - $C_6$  alkynyloxy group, a  $C_3$ - $C_6$  cycloalkyloxy group, a phenyl group (this group may be substituted by a halogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkoxy group, a  $C_1$ - $C_4$  haloalkyl group, a  $C_1$ - $C_4$  haloalkoxy group, a cyano group, a nitro group, a  $C_1$ - $C_6$  alkylthio group, a  $C_1$ - $C_6$  alkylsulfinyl group or a  $C_1$ - $C_6$  alkylsulfonyl group), a  $C_2$ - $C_6$  alkenylthio group, a  $C_2$ - $C_6$  alkynylthio group, a  $C_3$ - $C_6$  cycloalkylthio group, a  $C_1$ - $C_6$  alkylsulfinyl group, a  $C_2$ - $C_6$  alkenylsulfinyl group, a  $C_2$ - $C_6$  alkynylsulfinyl group, a  $C_3$ - $C_6$  cycloalkylsulfinyl group, a  $C_1$ - $C_6$  alkylsulfonyl group, a  $C_2$ - $C_6$  alkenylsulfonyl group, a  $C_2$ - $C_6$  alkynylsulfonyl group, a  $C_3$ - $C_6$  cycloalkylsulfonyl group, a hydroxyalkyl group, a  $C_2$ - $C_7$  acyl group, a  $C_1$ - $C_6$  alkoxy  $C_1$ - $C_6$  alkyl group, a cyano group, a cyano  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkoxycarbonyl group, a  $C_1$ - $C_6$  alkoxycarbonyl  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$

alkoxycarbonyl C<sub>2</sub>-C<sub>6</sub> alkenyl group, a carboxyl group, a carboxyl C<sub>1</sub>-C<sub>6</sub> alkyl group, a di C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxyimino C<sub>1</sub>-C<sub>6</sub> alkyl group, a hydroxyimino C<sub>1</sub>-C<sub>6</sub> alkyl group, a dioxolanyl group (this group may be substituted by a C<sub>1</sub>-C<sub>6</sub> alkyl group), an aldehyde group, an oxiranyl group, a NR<sup>9</sup>R<sup>10</sup> group or a CONR<sup>9</sup>R<sup>10</sup> group, and R<sup>9</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group, a C<sub>2</sub>-C<sub>7</sub> acyl group or a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group, and R<sup>10</sup> is a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group, a C<sub>2</sub>-C<sub>7</sub> acyl group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl group or a benzyloxycarbonyl group; ~~here R<sup>9</sup> and R<sup>10</sup> may, together with the carbon atom to which they are bonded, form a 5 to 7 membered saturated ring;~~

R<sup>2</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group (this group may be substituted by a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group or a C<sub>1</sub>-C<sub>4</sub> haloalkyl group), a C<sub>2</sub>-C<sub>7</sub> acyl group, a cyano group, a di C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxyimino C<sub>1</sub>-C<sub>6</sub> alkyl group, a hydroxyimino C<sub>1</sub>-C<sub>6</sub> alkyl group, a ~~dioxolanyl group (this group may be substituted by a C<sub>1</sub>-C<sub>6</sub> alkyl group),~~ a cyano C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> hydroxyalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl C<sub>1</sub>-C<sub>6</sub> alkyl group, a CR<sup>11</sup>R<sup>12</sup>NR<sup>9</sup>R<sup>10</sup> group, a CONR<sup>9</sup>R<sup>10</sup> group, a CR<sup>11</sup>R<sup>12</sup>CONR<sup>9</sup>R<sup>10</sup> group or a group represented by ~~any one of the formulae R<sup>2</sup>-1 to R<sup>2</sup>-13~~ R<sup>2</sup>-1 or R<sup>2</sup>-2:



and (wherein X is a hydrogen atom, a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a NR<sup>9</sup>R<sup>10</sup> group, a CONR<sup>9</sup>R<sup>10</sup> group, a C<sub>1</sub>-C<sub>4</sub> haloalkoxy group, a C<sub>2</sub>-C<sub>6</sub> alkenyloxy group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyloxy group, a

C<sub>2</sub>-C<sub>7</sub> acyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfinyl group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group, a cyano group, a nitro group or a

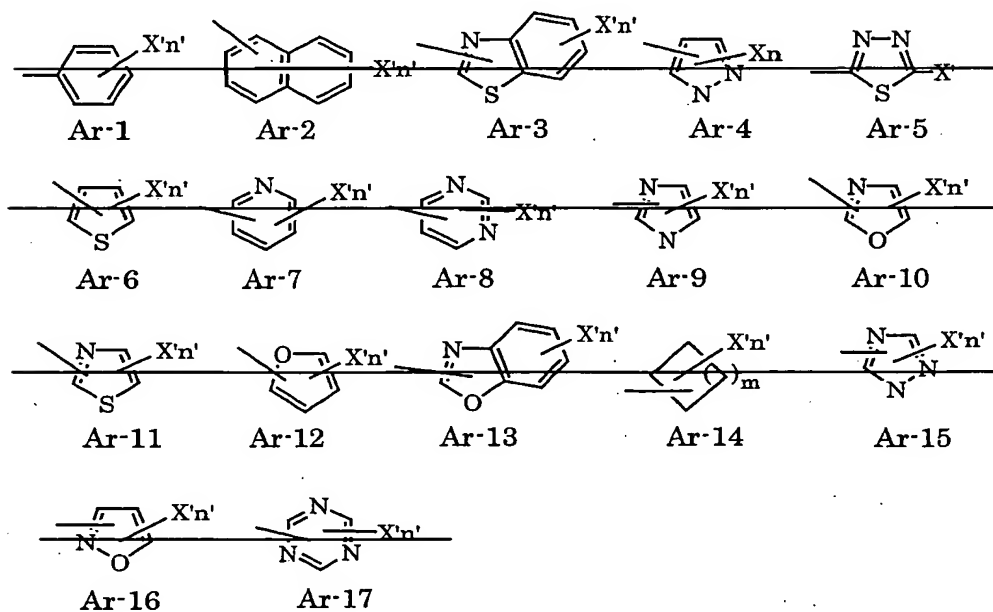
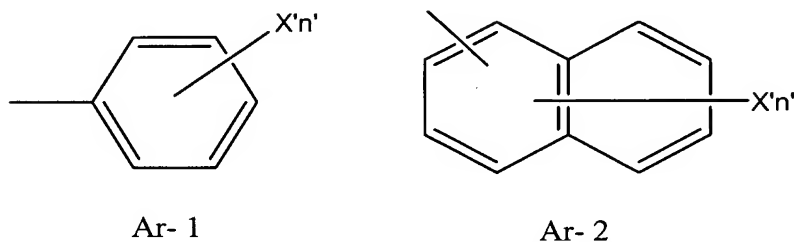
C<sub>1</sub>-C<sub>4</sub> haloalkyl group, n is an integer of from 1 to 3, and when n is an integer of 2 or 3, the plurality of X may be the same or different, and two adjacent lower alkoxy groups may be bonded to each other to form a C<sub>1</sub>-C<sub>3</sub> alkylenedioxy group), and each of R<sup>11</sup> and R<sup>12</sup> is a

hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group or a C<sub>1</sub>-C<sub>6</sub> alkoxy group;

R<sup>3</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a di C<sub>1</sub>-C<sub>6</sub> alkylamino group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a cyano C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl C<sub>1</sub>-C<sub>6</sub> alkyl group, an oxiranyl C<sub>1</sub>-C<sub>6</sub> alkyl group or a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl C<sub>1</sub>-C<sub>6</sub> alkyl group;

W is a -SO<sub>2</sub>- group;

Ar is a group represented by any one of the formulae Ar-1 to Ar-17 Ar-1 or Ar-2:



and (wherein X' is a hydrogen atom, a halogen atom, an alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a

C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a NR<sup>9</sup>R<sup>10</sup> group, a CONR<sup>9</sup>R<sup>10</sup> group, a C<sub>1</sub>-C<sub>4</sub> haloalkoxy group, a C<sub>2</sub>-C<sub>6</sub> alkenyloxy group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyloxy group, a

C<sub>2</sub>-C<sub>7</sub> acyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfinyl group, a C<sub>1</sub>-C<sub>6</sub> alkylsufonyl group, a cyano group, a nitro group or a

C<sub>1</sub>-C<sub>4</sub> haloalkyl group, n' is an integer of from 1 to 3, ~~m is an integer of from 0 to 3,~~  
and when n' is an integer of 2 or 3, the plurality of X' may be the same or different, and two adjacent lower alkoxy groups may be bonded to each other to form a C<sub>1</sub>-C<sub>3</sub> alkylenedioxy group);

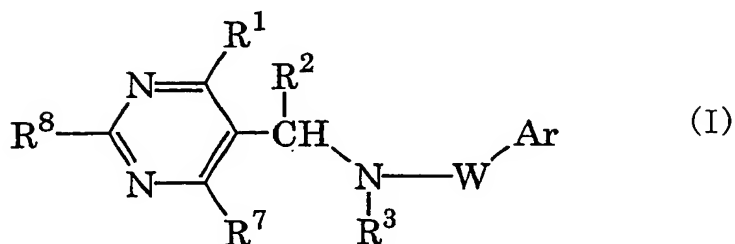
R<sup>7</sup> is a hydrogen atom, a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a

C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group or a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group; and

R<sup>8</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group or a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group.

Claim 4 (Currently Amended): A pyrimidine derivative represented by the formula

(I)



wherein  $R^1$  is a halogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkylcarbonyl  $C_1$ - $C_6$  alkyl group, a hydroxyl group, a  $C_2$ - $C_6$  alkenyl group, a  $C_2$ - $C_6$  alkynyl group, a  $C_3$ - $C_6$  cycloalkyl group (this group may be substituted by a halogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkoxy group or a  $C_1$ - $C_4$  haloalkyl group), a  $C_1$ - $C_4$  haloalkyl group, a  $C_1$ - $C_6$  alkoxy group, a  $C_1$ - $C_4$  haloalkoxy group, a  $C_2$ - $C_6$  alkenyloxy group, a  $C_2$ - $C_6$  alkynyloxy group, a  $C_3$ - $C_6$  cycloalkyloxy group, a phenyl group (this group may be substituted by a halogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkoxy group, a  $C_1$ - $C_4$  haloalkyl group, a  $C_1$ - $C_4$  haloalkoxy group, a cyano group, a nitro group, a  $C_1$ - $C_6$  alkylthio group, a  $C_1$ - $C_6$  alkylsulfinyl group or a  $C_1$ - $C_6$  alkylsulfonyl group), a

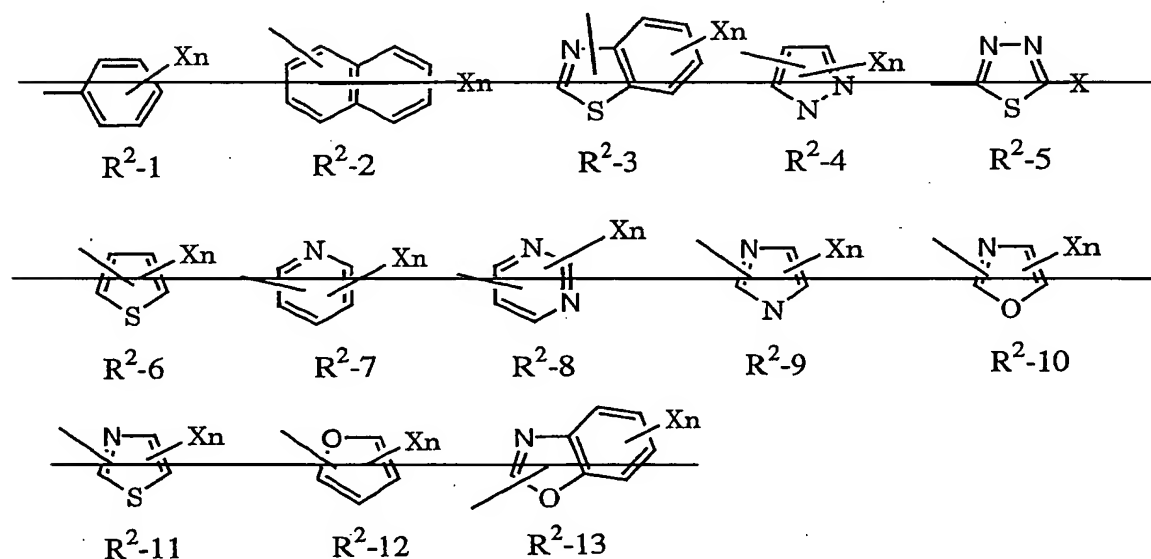
$C_1$ - $C_6$  alkylthio group (except for a case where  $R^2$  = phenyl group, and  $W=SO_2$ ), a  $C_2$ - $C_6$  alkenylthio group, a  $C_2$ - $C_6$  alkynylthio group, a  $C_3$ - $C_6$  cycloalkylthio group, a  $C_1$ - $C_6$  alkylsulfinyl group, a  $C_2$ - $C_6$  alkenylsulfinyl group, a

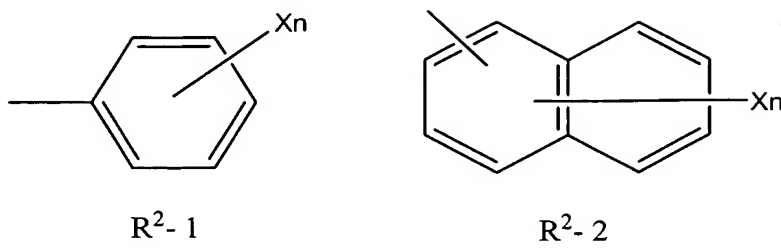
$C_2$ - $C_6$  alkynylsulfinyl group, a  $C_3$ - $C_6$  cycloalkylsulfinyl group, a  $C_1$ - $C_6$  alkylsulfonyl group, a  $C_2$ - $C_6$  alkenylsulfonyl group, a  $C_2$ - $C_6$  alkynylsulfonyl group, a  $C_3$ - $C_6$  cycloalkylsulfonyl group, a  $C_1$ - $C_6$  hydroxyalkyl group, a  $C_2$ - $C_7$  acyl group, a  $C_1$ - $C_6$  alkoxy  $C_1$ - $C_6$  alkyl group, a cyano group, a cyano  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkoxycarbonyl group, a  $C_1$ - $C_6$  alkoxycarbonyl  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkoxycarbonyl  $C_2$ - $C_6$  alkenyl group, a carboxyl group, a carboxyl  $C_1$ - $C_6$  alkyl group, a di  $C_1$ - $C_6$  alkoxy  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkoxyimino  $C_1$ - $C_6$  alkyl group, a hydroxyimino  $C_1$ - $C_6$  alkyl group, a dioxolanyl group (this group may be substituted by a  $C_1$ - $C_6$  alkyl group), an aldehyde group, an oxiranyl group, a  $NR^9R^{10}$  group or a  $CONR^9R^{10}$  group, and  $R^9$  is a hydrogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_2$ - $C_6$  alkenyl group, a  $C_2$ - $C_6$  alkynyl group, a  $C_1$ - $C_4$  haloalkyl group, a  $C_1$ - $C_6$  alkoxy  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkylthio  $C_1$ - $C_6$  alkyl group, a  $C_3$ - $C_6$  cycloalkyl group, a  $C_2$ - $C_7$  acyl group or a  $C_1$ - $C_6$  alkylsulfonyl group, and  $R^{10}$  is a  $C_1$ - $C_6$  alkyl group, a  $C_2$ - $C_6$  alkenyl group, a  $C_2$ - $C_6$  alkynyl group, a  $C_1$ - $C_4$  haloalkyl group, a  $C_1$ - $C_6$  alkoxy  $C_1$ - $C_6$  alkyl group, a  $C_1$ - $C_6$  alkylthio



C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group, a C<sub>2</sub>-C<sub>7</sub> acyl group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy carbonyl group or a benzyloxy carbonyl group; ~~here R<sup>9</sup> and R<sup>10</sup> may, together with the carbon atom to which they are bonded, form a 5- to 7-membered saturated ring,~~

R<sup>2</sup> is a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group (this group may be substituted by a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group or a C<sub>1</sub>-C<sub>4</sub> haloalkyl group), a C<sub>2</sub>-C<sub>7</sub> acyl group, a cyano group, a di C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxyimino C<sub>1</sub>-C<sub>6</sub> alkyl group, a hydroxyimino C<sub>1</sub>-C<sub>6</sub> alkyl group, ~~a dioxolanyl group (this group may be substituted by a C<sub>1</sub>-C<sub>6</sub> alkyl group),~~ a cyano C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> hydroxyalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy carbonyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy carbonyl C<sub>1</sub>-C<sub>6</sub> alkyl group, a CR<sup>11</sup>R<sup>12</sup>NR<sup>9</sup>R<sup>10</sup> group, a CONR<sup>9</sup>R<sup>10</sup> group, a CR<sup>11</sup>R<sup>12</sup>CONR<sup>9</sup>R<sup>10</sup> group or a group represented by ~~any one of the formulae R<sup>2</sup>-1 to R<sup>2</sup>-13~~ R<sup>2</sup>-1 or R<sup>2</sup>-2:





and (wherein X is a hydrogen atom, a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a NR<sup>9</sup>R<sup>10</sup> group, a CONR<sup>9</sup>R<sup>10</sup> group, a C<sub>1</sub>-C<sub>4</sub> haloalkoxy group, a C<sub>2</sub>-C<sub>6</sub> alkenyloxy group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyloxy group, a

C<sub>2</sub>-C<sub>7</sub> acyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfinyl group, a C<sub>1</sub>-C<sub>6</sub> alkylsufonyl group, a cyano group, a nitro group or a

C<sub>1</sub>-C<sub>4</sub> haloalkyl group, n is an integer of from 1 to 3, and when n is an integer of 2 or 3, the plurality of X may be the same or different, and two adjacent lower alkoxy groups may be bonded to each other to form a C<sub>1</sub>-C<sub>3</sub> alkylenedioxy group), and each of R<sup>11</sup> and R<sup>12</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group or a C<sub>1</sub>-C<sub>6</sub> alkoxy group,;

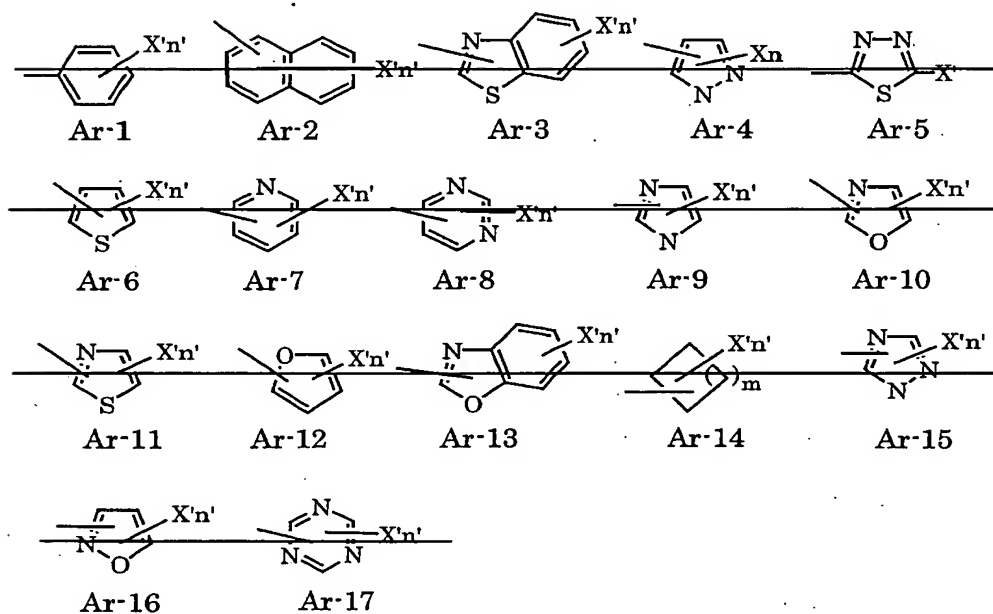
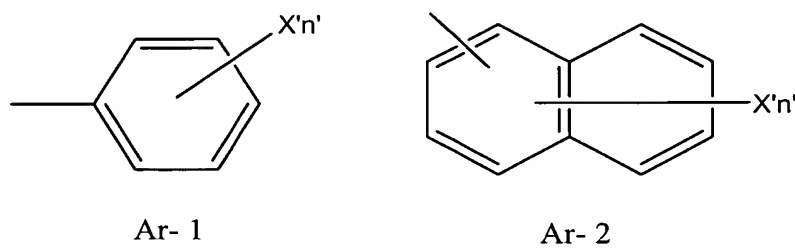
R<sup>3</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a di C<sub>1</sub>-C<sub>6</sub> alkylamino group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a cyano C<sub>1</sub>-C<sub>6</sub> alkyl group or a C<sub>3</sub>-C<sub>6</sub> cycloalkyl C<sub>1</sub>-C<sub>6</sub> alkyl group,;

W is a -C(=Q)Z- group or a -SO<sub>2</sub>- group, Q is an oxygen atom or a sulfur atom, Z is an oxygen atom, a sulfur atom, a -NR<sup>6</sup>- group, a -C(R<sup>4</sup>)R<sup>5</sup>- group, a

-C(R<sup>4</sup>)R<sup>5</sup>-Q- group, a -NR<sup>6</sup>NR<sup>6a</sup>- group or a -NR<sup>6</sup>C(R<sup>4</sup>)R<sup>5</sup>- group, and each of R<sup>4</sup> and R<sup>5</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a halogen atom or a C<sub>1</sub>-C<sub>6</sub> alkoxy group, and each of R<sup>6</sup> and R<sup>6a</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group or a C<sub>2</sub>-C<sub>6</sub>

alkynyl group; here  $R^3$  and  $R^6$  may, together with the carbon atom to which they are bonded, form a 5 to 7 membered cyclic urea,

Ar is a group represented by any one of the formulae Ar-1 to Ar-17 Ar-1 or Ar-2:



and (wherein X' is a hydrogen atom, a halogen atom, a  $C_1$ - $C_6$  alkyl group, a  $C_2$ - $C_6$  alkenyl group, a  $C_2$ - $C_6$  alkynyl group, a  $C_1$ - $C_6$  alkoxy group, a  $C_1$ - $C_6$  alkoxy  $C_1$ - $C_6$  alkyl group, a  $NR^9R^{10}$  group, a  $CONR^9R^{10}$  group, a  $C_1$ - $C_4$  haloalkoxy group, a  $C_2$ - $C_6$  alkenyloxy group, a  $C_3$ - $C_6$  cycloalkyloxy group, a

C<sub>2</sub>-C<sub>7</sub> acyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy carbonyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfinyl group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group, a cyano group, a nitro group or a

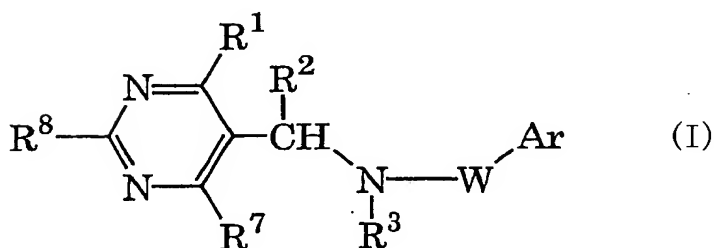
C<sub>1</sub>-C<sub>4</sub> haloalkyl group, n' is an integer of from 1 to 3, ~~m is an integer of from 0 to 3,~~  
and when n' is an integer of 2 or 3, the plurality of X' may be the same or different, and two adjacent lower alkoxy groups may be bonded to each other to form a C<sub>1</sub>-C<sub>3</sub> alkylenedioxy group);

R<sup>7</sup> is a hydrogen atom or a halogen atom; and

R<sup>8</sup> is a hydrogen atom.

Claim 5 (Currently Amended): A pyrimidine derivative represented by the formula

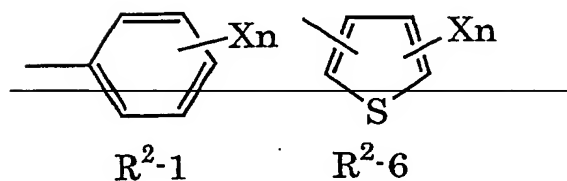
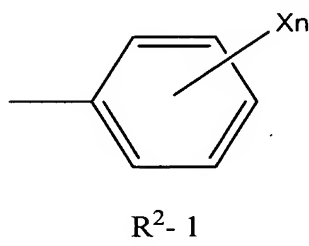
(I)



wherein R<sup>1</sup> is a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group (this group may be substituted by a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group or a C<sub>1</sub>-C<sub>4</sub> haloalkyl group), a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a phenyl group (this group may be substituted by a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>4</sub> haloalkoxy group, a cyano group, a nitro group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfinyl group or a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group), a C<sub>1</sub>-C<sub>6</sub> alkylthio group (except for a case where R<sup>2</sup>=phenyl group, and W=SO<sub>2</sub>), a C<sub>1</sub>-C<sub>6</sub> alkylsulfinyl group, a C<sub>2</sub>-C<sub>7</sub> acyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a cyano group, a

cyano C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy carbonyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy carbonyl C<sub>2</sub>-C<sub>6</sub> alkenyl group, a carboxyl group, a di C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group or a C<sub>1</sub>-C<sub>6</sub> alkoxyimino C<sub>1</sub>-C<sub>6</sub> alkyl group;

R<sup>2</sup> is a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group (this group may be substituted by a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group or a C<sub>1</sub>-C<sub>4</sub> haloalkyl group) a C<sub>2</sub>-C<sub>7</sub> acyl group, or a group represented by either the formula R<sup>2</sup>-1 or R<sup>2</sup>-6:



and (wherein X is a hydrogen atom, a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a NR<sup>9</sup>R<sup>10</sup> group, a CONR<sup>9</sup>R<sup>10</sup> group, a C<sub>1</sub>-C<sub>4</sub> haloalkoxy group, a C<sub>2</sub>-C<sub>6</sub> alkenyloxy group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyloxy group, a

C<sub>2</sub>-C<sub>7</sub> acyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy carbonyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfinyl group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group, a cyano group, a nitro group or a

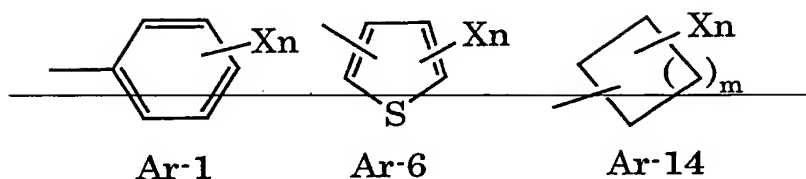
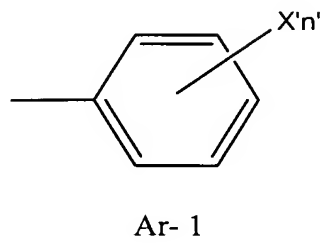
C<sub>1</sub>-C<sub>4</sub> haloalkyl group, n is an integer of from 1 to 3, and when n is an integer of 2 or 3, the plurality of X may be the same or different, and two adjacent lower alkoxy groups may be bonded to each other to form a C<sub>1</sub>-C<sub>3</sub> alkylenedioxy group), and R<sup>9</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a

C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group, a C<sub>2</sub>-C<sub>7</sub> acyl group or a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group, and R<sup>10</sup> is a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group, a C<sub>2</sub>-C<sub>7</sub> acyl group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxycarbonyl group or a benzyloxycarbonyl group, ~~here R<sup>9</sup> and R<sup>10</sup> may, together with the carbon atom to which they are bonded, form a 5 to 7 membered saturated ring, and~~ each of R<sup>11</sup> and R<sup>12</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group or a C<sub>1</sub>-C<sub>6</sub> alkoxy group;

R<sup>3</sup> is a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group or a cyano C<sub>1</sub>-C<sub>6</sub> alkyl group;

W is a -C(=Q)Z- group or a -SO<sub>2</sub>- group, Q is an oxygen atom or a sulfur atom, Z is a -NR<sup>6</sup>- group, a -C(R<sup>4</sup>)R<sup>5</sup>- group, a -C(R<sup>4</sup>)R<sup>5</sup>-Q- group, a -NR<sup>6</sup>NR<sup>6a</sup>- group or a -NR<sup>6</sup>C(R<sup>4</sup>)R<sup>5</sup>- group, and each of R<sup>4</sup> and R<sup>5</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a halogen atom or a C<sub>1</sub>-C<sub>6</sub> alkoxy group, and each of R<sup>6</sup> and R<sup>6a</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group or a C<sub>2</sub>-C<sub>6</sub> alkynyl group; ~~here R<sup>3</sup> and R<sup>6</sup> may, together with the carbon atom to which they are bonded, form a 5 to 7 membered cyclic urea,~~

Ar is a group represented by ~~either the formula Ar-1, Ar-6 or Ar-14:~~



and (wherein  $\text{X}$   $\text{X}'$  is a hydrogen atom, a halogen atom, a  $\text{C}_1$ - $\text{C}_6$  alkyl group, a  $\text{C}_2$ - $\text{C}_6$  alkenyl group, a  $\text{C}_2$ - $\text{C}_6$  alkynyl group, a  $\text{C}_1$ - $\text{C}_6$  alkoxy group, a  $\text{C}_1$ - $\text{C}_6$  alkoxy  $\text{C}_1$ - $\text{C}_6$  alkyl group, a  $\text{NR}^9\text{R}^{10}$  group, a  $\text{CONR}^9\text{R}^{10}$  group, a  $\text{C}_1$ - $\text{C}_4$  haloalkoxy group, a  $\text{C}_2$ - $\text{C}_6$  alkenyloxy group, a  $\text{C}_3$ - $\text{C}_6$  cycloalkyloxy group, a

$\text{C}_2$ - $\text{C}_7$  acyl group, a  $\text{C}_1$ - $\text{C}_6$  alkoxycarbonyl group, a  $\text{C}_1$ - $\text{C}_6$  alkylthio group, a  $\text{C}_1$ - $\text{C}_6$  alkylsulfinyl group, a  $\text{C}_1$ - $\text{C}_6$  alkylsufonyl group, a cyano group, a nitro group or a

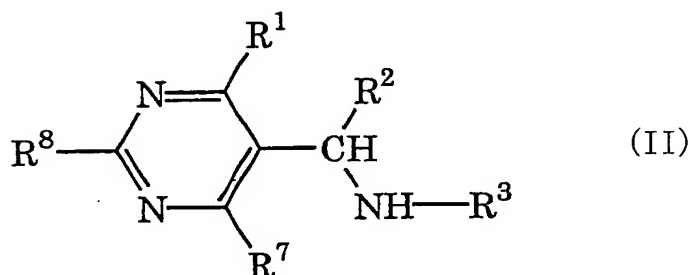
$\text{C}_1$ - $\text{C}_4$  haloalkyl group,  $n$   $n'$  is an integer of from 1 to 3,  ~~$m$  is an integer of from 2 or 3,~~  
 and when  $n$   $n'$  is an integer of 2 or 3, the plurality of  $\text{X}$   $\text{X}'$  may be the same or different, and two adjacent lower alkoxy groups may be bonded to each other to form a  $\text{C}_1$ - $\text{C}_3$  alkylenedioxy group);

$\text{R}^7$  is a hydrogen atom, a halogen atom, a  $\text{C}_1$ - $\text{C}_6$  alkyl group, a

$\text{C}_1$ - $\text{C}_6$  alkoxy group, a  $\text{C}_1$ - $\text{C}_6$  alkylthio group, a  $\text{C}_1$ - $\text{C}_4$  haloalkyl group or a  $\text{C}_3$ - $\text{C}_6$  cycloalkyl group; and

$\text{R}^8$  is a hydrogen atom, a  $\text{C}_1$ - $\text{C}_6$  alkyl group, a  $\text{C}_1$ - $\text{C}_6$  alkylthio group, a  $\text{C}_1$ - $\text{C}_4$  haloalkyl group or a  $\text{C}_3$ - $\text{C}_6$  cycloalkyl group.

Claim 6 (Currently Amended): A pyrimidine derivative represented by an intermediate represented by the formula (II)



wherein R<sup>1</sup> is a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group (this group may be substituted by a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group or a C<sub>1</sub>-C<sub>4</sub> haloalkyl group), a phenyl group (this group may be substituted by a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>4</sub> haloalkoxy group, a cyano group, a nitro group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfinyl group or a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group), a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a dioxolanyl group (this group may be substituted by a C<sub>1</sub>-C<sub>6</sub> alkyl group) or a di C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group;

R<sup>2</sup> is a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkylthio C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group (this group may be substituted by a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group or a C<sub>1</sub>-C<sub>4</sub> haloalkyl group), a phenyl group (this group may be substituted by a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>4</sub> haloalkoxy group, a cyano group, a nitro group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfinyl group or a C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl group), ~~a thienyl group (this group may be substituted by a halogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a~~

~~C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>1</sub>-C<sub>4</sub> haloalkyl group, a C<sub>1</sub>-C<sub>4</sub> haloalkoxy group, a cyano group, a nitro group, a C<sub>1</sub>-C<sub>6</sub> alkylthio group, a C<sub>1</sub>-C<sub>6</sub> alkylsulfinyl group or a C<sub>1</sub>-C<sub>6</sub>~~



~~alkylsulfonyl group), or a di C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group or a dioxolanyl group (this group may be substituted by a C<sub>1</sub>-C<sub>6</sub> alkyl group);~~

R<sup>3</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>2</sub>-C<sub>6</sub> alkenyl group, a C<sub>2</sub>-C<sub>6</sub> alkynyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group, a C<sub>1</sub>-C<sub>6</sub> alkoxy C<sub>1</sub>-C<sub>6</sub> alkyl group, a cyano C<sub>1</sub>-C<sub>6</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl C<sub>1</sub>-C<sub>6</sub> alkyl group, an oxiranyl C<sub>1</sub>-C<sub>6</sub> alkyl group or a C<sub>1</sub>-C<sub>6</sub> alkoxy carbonyl C<sub>1</sub>-C<sub>6</sub> alkyl group;

R<sup>7</sup> is a hydrogen atom or a C<sub>1</sub>-C<sub>6</sub> alkoxy group; and

R<sup>8</sup> is a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group or a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group.

Claim 7 (Previously Presented): A herbicide containing the pyrimidine derivative as defined in Claim 1, as an active ingredient.

Claim 8 (Previously Presented): A herbicide containing the pyrimidine derivative as defined in Claim 2, as an active ingredient.

Claim 9 (Previously Presented): A herbicide containing the pyrimidine derivative as defined in Claim 3, as an active ingredient.

Claim 10 (Previously Presented): A herbicide containing the pyrimidine derivative as defined in Claim 4, as an active ingredient.

Claim 11 (Previously Presented): A herbicide containing the pyrimidine derivative as defined in Claim 5, as an active ingredient.